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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,967	08/26/2003	Lawrence G. Rodriguez	5801-03/B & D0003.US	2849

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EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3673

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01/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/647,967	Applicant(s) RODRIGUEZ ET AL.	
	Examiner CHRISTOPHER BOSWELL	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification is absent of any direction or guidance that would guide one to limit the twist to only about a half-turn rotation; moreover, the only recitation of a twist in the specification is found on page 3, lines 3-7 which mentions nothing more than the helical surfaces taper and twist from a transition line of the shaft toward a tip end of the shaft. Accordingly, it is unclear as to the degree of twist found in the helical surfaces.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-10, 12-16 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,925,844 to Liu.

Liu discloses a lockset having a lock mechanism (100) including an actuator (110) having an aperture (112 and 114), an operator (111), and a turn button (200) mounted in the operator (the turn-button of Liu is capable of being mounted in the operator during assembly of the lockset), the turn button having a head portion (220), and a shaft (230) having a leading helical end tip (236'''), and means for self-alignment (column 7, lines 19-24) of the shaft with the aperture of the lock mechanism as the shaft is inserted into the aperture, as in claims 1 and 4, as well as the leading helical portion having a plurality of leading helical surfaces (figure 6C) that taper and twist from a transition line of the shaft toward an end of the shaft, as in claims 2, 5, and 9, as well as the plurality of helical surfaces smoothly transition between adjacent helical surfaces (smooth angle between the adjoining sides of the helical surfaces; figure 6C), as in claims 3, 6, and 10, wherein once the leading helical end portion engages the aperture, a rotation of the turn-button effects a corresponding rotation of the rotatable actuator of the lock mechanism (column 7, lines 53-58), as in claim 8.

Liu further discloses a rotation of the turn-button effects a corresponding rotation of the aperture of the lock mechanism (column 7, lines 53-58), as in claims 12 and 13, as well as the aperture of the lock mechanism has a substantially rectangular shape (the aperture has a complementary shape to that of the shaft), as in claims 13, 15 and 18, wherein a number of the plurality of leading helical surfaces is greater than two (at least 3 helical surfaces; figure 6C), as in claims 14, 16 and 19, and the leading helical end portion forms a plurality of side surfaces of

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the shaft (figure 6C), as in claim 20, where the twist is about a half-turn rotation (figure 6C), as in claim 21.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu, as applied above, in view of U.S. Patent Number 842,834 to Hurdle.

Liu discloses the invention substantially as claimed. Liu discloses a lock cylinder that has a helical keyway that is container within a lock shell. However, Liu does not explicitly disclose the exact environment the lock shell would be employed. Hurdle teaches of a locking assembly having a helical keyway inside of an operator, where the operator is a doorknob (r), in the same field of endeavor for the purpose of providing a compact lock, which cannot be picked and may be attached to a lock having a knob mounted on an actuation spindle (page 1, lines 14-21). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the locking assembly of Liu into a door knob, as taught by Hurdle, where the shaft of the turn-button would extend from the head portion through the door knob to engage the aperture of the lock mechanism in order to provide a compact lock which cannot be picked and may be attached to a lock having a knob mounted on an actuation spindle.

Response to Arguments

Applicant's arguments filed October 10, 2008 have been fully considered but they are not persuasive. In regards to the argument that Liu does not disclose a turn-button mounted in an operator during assembly of said lockset, the examiner respectfully disagrees. The examiner takes the stance the "mounted" is defined to be placed on a suitable support, wherein the turn-button of Liu is placed within the operator to allow a user to operate the lock between a locked and unlocked conditions. Regarding the limitation of "mounted in an operator during assembly of said lockset", the examiner reminds the applicant that the aforementioned limitation is a functional use recitation that imparts no structural difference to the invention, where a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Accordingly, the turn-button of Liu is fully capable of being mounted in the operator during assembly of the lockset.

Additionally regarding the argument that Liu does not disclose a turn-button or turnpiece, the examiner respectfully disagrees. Turn-buttons or turnpieces are used to actuate a lock or deadbolt between locked and unlocked positions by a user. Wherein keys are commonly used for this practice, especially when a user chooses to prevent unauthorized personal from actuating the lock or deadbolt. Furthermore, U.S. Patent Number 5,361,614; 5, 140, 843; and 3,630,053 show that it has been proven that keys are used as permanent turn-buttons or turnpieces. Furthermore, the claims are absent of the turn-button being permanently attached in the operator, and thus, a key does read over the current claims.

In regards to the argument that Liu does not disclose a shaft, the examiner respectfully disagrees. One with ordinary skill in the art would recognize that key blades are also known as shafts or shanks. Additionally, the examiner reminds the applicant that a shaft is defined as a commonly cylindrical bar used to support rotating pieces or to transmit power or motion by rotation, where the key blade is substantially cylindrical and transmits a rotational power from the head to the operator.

Regarding the argument that the shaft of Liu does not taper from a transition line, the examiner respectfully disagrees. As clearly shown in figures 6, the helical surfaces taper towards a center, transition line (axial center line of the shaft) and end at the end of the shaft, establishing a cylindrical shaft formed by the helical surfaces.

In regards to the argument that the plurality of leading helical surfaces of Liu do not smoothly transition between adjacent helical surfaces, the examiner respectfully disagrees. The inner surfaces of the helical transition between the distinct helical surfaces with smooth continual webs absent of any abrupt stops or jagged edges, thus a smooth transition between the helical surfaces, see figure 6C. Further, the helical surfaces are smoothed so that the helical surfaces smoothly transition for one to another, i.e., smoothly transition between adjacent helical surfaces.

Regarding the argument that Liu does not disclose means for facilitating self-alignment of the shaft with an aperture as the shaft is inserted into the aperture, the examiner respectfully disagrees. The spiral design of the shaft of Liu can only be inserted in a proper way, and thus due to the congruent shapes of the shaft and aperture, the turn-button self-aligns to correctly unlock the lock mechanism.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BOSWELL whose telephone number is (571)272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia L Engle/
Supervisory Patent Examiner,
Art Unit 3673

CJB /cb/
January 13, 2009